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A method for a single device

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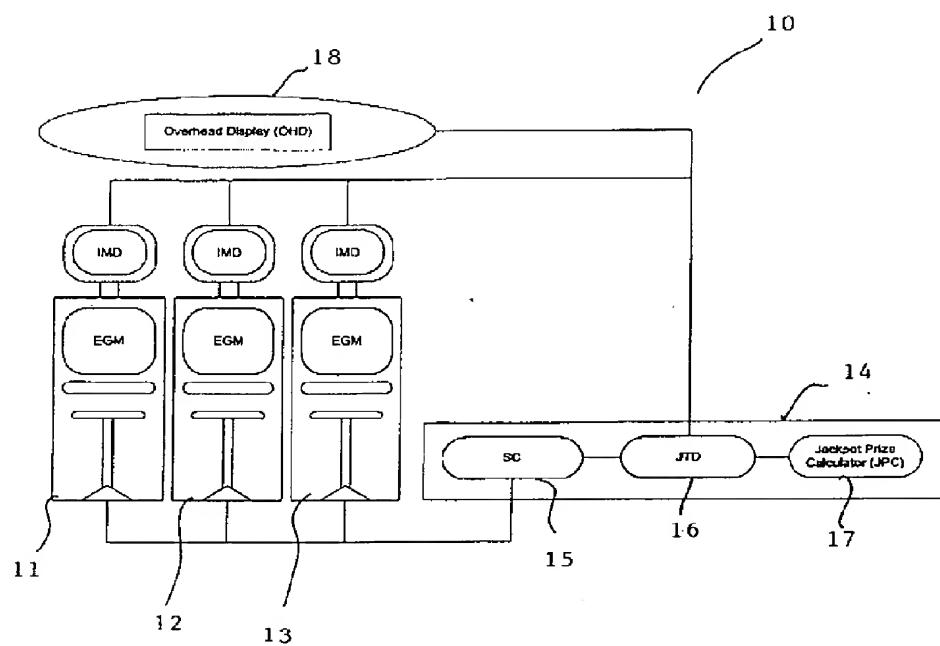
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ABSTRACT

A method of awarding a prize in a gaming system including at least one game console comprising the steps of providing a random trigger value, periodically 5 receiving count data from one game console, being data representing at least one parameter of the game console, calculating a total value representing the total count data received, comparing the total value with the trigger value, transmitting a prize instruction signal to an 10 output means if the total value has a predetermined relationship with the trigger value, whereby the prize instruction signal results in at least one game console issuing a prize.

FIGURE 1



AUSTRALIA
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COMPLETE SPECIFICATION
STANDARD PATENT

Applicant:

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Invention Title:

A METHOD FOR A SINGLE DEVICE

The following statement is a full description of this invention, including the best method of performing it known to us:

A METHOD FOR A SINGLE DEVICE

The present invention relates to gaming systems such as those incorporating gaming machines including slot machines, poker machines, keno machines and others. The 5 invention also relates to internet gaming using personal computers and other devices.

The present invention is particularly relevant to jackpot gaming systems in which a number of electric 10 gaming machines (EGM's) are networked. These gaming systems can be externally triggered promotional jackpots, EGM triggered jackpots and externally triggered regulatory jackpots.

EGM triggered jackpots require EGM's specifically made for this purpose. Accordingly a club wishing to 15 offer this facility with their EGMs must purchase new ones that offer this feature. All EGMs participating in a linked jackpot of this type typically must be of the same type, e.g. manufacturer and game. Furthermore they tend to have a relatively limited configurability in terms of 20 prize values, return to player, number of levels and themes.

In contrast to the EGM triggered jackpots, externally triggered jackpots have a much greater degree 25 of flexibility and therefore attractiveness to gaming venues.

In many jurisdictions however the winnings paid in promotional external jackpots are not deductible for 30 gaming tax purposes. This is because promotional jackpots do not offer the required fairness (statistically equal probability of win per unit bet for all players at all times, i.e. non-deterministic) to be considered tax deductible regulatory jackpots. A typical promotional jackpot uses simple deterministic triggering methods such that the jackpot is guaranteed to go off within a certain 35 amount of turnover. Conventionally the implementation of externally triggered regulatory jackpots has been difficult due to the requirement for non-deterministic

behaviour. Furthermore meeting the regulatory jackpot requirements is difficult when the EGMs participating in the jackpot are of different denominations and/or offer a variety of bets (multi-line and/or ability to select 5 number of credits to bet on each play) and also when the communications between the EGM and the external jackpot trigger do not guarantee play by play delivery of information.

Australian patent application AU1999434453 10 discloses a prize awarding system which addresses the problems experienced by the above non-deterministic jackpot systems.

In this patent application a random process is implemented with the desired statistical properties based 15 on the actual occurrence of turnover. While such methods attempt to reduce computational load and critical timing requirements compared to jackpots that are triggered off specific plays of an EGM, there is still significant software complexity, computational load and real time 20 requirements associated with these methods. In addition the actual statistical properties of the jackpot depend critically on details of the implementation and the system on which it runs. Verification of correct jackpot operation under all patterns of play and system load is 25 time consuming and itself requires statistical analysis to interpret the results.

Another Australian patent number 589158 describes 30 a system which consists of a number of poker machines producing an incrementing signal which is totalled by a counting means. A jackpot is triggered when the counting means reaches a predetermined value, with the jackpot being awarded to the machine that caused the increment to go over the trigger value. However the system described in this patent application has a number of drawbacks. 35 Firstly the jackpot prize cannot be a fixed value. It is always dependent upon the amount of turnover before the trigger value is reached by the counting means. In

addition it is noted that the jackpot is triggered from a combined count from each of the EGMs.

In the above system the jackpot is triggered based on a uniform distribution for the random number 5 which is used as the trigger value.

In addition, the random number range used must have a lower bound of the jackpot minimum display/prize value and an upper bound of the maximum desired display/prize value, leading to the situation that as the 10 display value approaches, the maximum the probability of win inherently increases.

It would be desirable to produce an improved gaming system.

For convenience any game playing module, whether 15 this be a mechanical device such as an electronic gaming machine or a graphical user interface appearing on a PC or similar linked to the internet or other communication network, will be referred to as a gaming console.

It is to be understood that, if any prior art 20 publication is referred to herein, such reference does not constitute an admission that the publication forms a part of the common general knowledge in the art, in Australia or in any other country.

According to one aspect of the present invention 25 there is provided a method of awarding a prize in a gaming system including at least one game console comprising the steps of providing a random trigger value, periodically receiving count data from one game console, being data representing at least one parameter of the game console, 30 calculating a total value representing the total count data received, comparing the total value with the trigger value, transmitting a prize instruction signal to an output means if the total value has a predetermined relationship with the trigger value, whereby the prize 35 instruction signal results in at least one game console issuing a prize.

It is preferred that the output means is

connected to a display means which indicates that a prize has been won by the at least one game console.

The prize instruction signal may be sent to the one game console.

5 The display means may include a sign, an audio visual indication or some other method which does not need to interact with the one game console.

10 Preferably, the prize instruction signal includes a prize display signal and a game console signal for updating one or more of the game consoles.

15 According to one embodiment it is preferred that the system includes a single game console operating on its own or a number of game consoles linked through a communication network but each operating independently in accordance with the above method.

It is preferred that the random trigger value is derived from a random variable having a non-uniform distribution.

20 Preferably the method includes providing a plurality of random trigger values with each trigger value being associated with a respective gaming console.

According to one embodiment the method includes providing a plurality of random trigger values for a plurality of respective game consoles.

25 Preferably the method includes providing a plurality of count storage means for respectively receiving count data from respective game consoles and calculating a total value representing the total count data received respectively for each game console.

30 Preferably the method includes providing a jackpot trigger device which is adapted to transmit the prize instruction signal to the output means of any game console for which the total count data received has a predetermined relationship with the trigger value for that game console.

35 Preferably the method includes providing a jackpot prize calculator for determining the prize for any

one of the game consoles if the total count data received and stored by the jackpot trigger device has the predetermined relationship with the trigger value for that game console.

5 Preferably the non-uniform distribution is a geometric distribution.

Preferably the random variable is added to a predetermined offset value to produce the random trigger value.

10 Preferably the offset value is calculated and stored in a memory location prior to addition to the random variable.

15 The random variable may have a distribution which is modified by a function to generate a value with a geometric distribution.

Preferably the function includes an inverse geometric distribution.

It is preferred that the prize is determined independently of the count data.

20 Preferably the count data is collected synchronously with game play on the gaming console.

Alternatively count data is collected asynchronously with game play on the gaming console.

25 It is preferred that the comparing step is performed synchronously with playing the gaming console.

Alternatively the comparison step is performed asynchronously with playing the gaming console.

The comparing step may be performed synchronously with receiving count data.

30 Alternatively the comparing step may be performed asynchronously with receiving count data.

It is preferred that the predetermined relationship is that the total value is equal to the trigger value.

35 Alternatively the predetermined relationship is that the total value is a multiple of the trigger value.

Alternatively the predetermined relationship is

that the total value is related to the trigger value through a mathematical relationship.

According to another embodiment the predetermined relationship is that the total value is greater than the 5 trigger value.

According to another embodiment the predetermined relationship is that the total value has a sequence of count data which matches the sequence of the trigger value. For example the trigger value could be one gaming 10 console or a number of gaming consoles together producing a sequence of pay outs, symbols, or game plays such as three lines followed by five lines, followed by one line if the gaming consoles are configured by manufacturers to output signals indicative of this.

15 Preferably the count data represents one game played on one game console.

According to one embodiment the count data represents multiple games played on one game console.

20 Alternatively the count data represents one event occurring on one game console.

Alternatively the count data represents one event occurring on greater than one game console.

25 Preferably parameters of the count data include any one of the above recited alternatives relating to count data.

The parameters preferably include:

a predetermined amount of money spent/gambled on a gaming console.

30 a predetermined number of indicia arrangements on a gaming console;

a predetermined combination of events on different gaming consoles;

each time a gaming console is played;

35 a predetermined turnover of one or more gaming consoles or predetermined function of turnover.

Preferably the method includes the step of receiving count data from each gaming console in the

gaming system.

The method may include gaming consoles which are electronic gaming machines, internet based gaming consoles visible on a computer screen, lotto type display screens, 5 hardware based, software based or any combination thereof.

The method may also include loyalty systems and may therefore include transaction terminals such as those associated with EFTPOS or Visa. Every time a customer 10 makes a transaction count data could be transmitted to a central console whereby a person has a chance of winning a jackpot in accordance with the invention broadly described above.

The method may include providing a gaming system with a plurality of gaming consoles linked in a network or 15 through remote communication means such as the internet.

The gaming system may include a controller, a trigger value generator, a jackpot triggering means and a display means separate from each gaming console.

Preferably the system includes a storage means 20 for storing count data.

The method may include providing an accumulator for totalling the count data stored in the storage means.

The accumulator preferably is part of the storage means.

25 The method may include providing a controller to provide the random trigger value.

The method may include receiving count data each time one game console is played and storing the count data in a dedicated memory for the associated game console.

30 Preferably the method includes calculating the trigger value by adding a random value to an offset value.

It is preferred that the offset is only needed to achieve behaviour equivalent of that that would be obtained if the count was reset each time a new trigger 35 value was picked from the random number generator. Thus, the trigger value may be derived according to anyone of the following options:

a. Adding the offset to the value obtained from the random number generator to obtain the trigger value;

5 b. Calculating a derived count equal to the raw count minus the offset and compare the derived count to a trigger value obtained directly from the random number generator; and

10 c. Resetting the count to zero every time a new trigger value is obtained directly from the random number source.

The random value may be calculated based on a parameter indicative of the probability of a win.

The random value may be calculated to have a predetermined geometrical probability distribution.

15 Preferably the method includes at a predetermined time (including occasion) providing a new random trigger value.

20 The method may include providing a new random trigger value for one game console after a prize is issued to that game console.

The method may include calculating a random value having one probability distribution and transforming the random value by a predetermined function to generate a random value with a different probability distribution.

25 Preferably the function is an inverse distribution.

Preferably the random value is not uniformly distributed.

30 The random value may be generated from a pseudo random number generator.

It is preferred that the trigger value is reset more frequently than once per output of the prize instruction signal to the game controller.

35 The offset value may be set at the current total value.

The offset value and the random value may be selected and a trigger value reset whenever a prize

instruction signal is sent to the game console.

It is preferred that count data is reset to a predetermined number such as 0 after a prize instruction signal is output.

5 Preferably the random value is recalculated after a prize instruction signal is output.

Preferably the random value is recalculated after the prize instruction signal is output whereby the trigger value is greater than the total value.

10 Preferably the predetermined prize includes money, extra games on a game console, calculated start up amount plus a percentage of turnover from the game console.

15 Preferably the prize incorporates a percentage of turnover from one or more game consoles.

Preferably the value of the prize awarded is determined as a start up amount plus a percentage of turnover from the game console.

Preferably, the game console is an EGM.

20 The value of the prize awarded may be determined by some additional game of chance offered to the player of the EGM when the prize instruction signal is output.

25 According to one embodiment of the invention the method is implemented in software running on a jackpot trigger device networked to one or more EGM's.

The method may be implemented in software running on a jackpot triggering device connected to or forming part of a single EGM.

30 The prize may be reset to a start up amount when the prize instruction signal is output.

According to another aspect of the present invention there is provided a controller for use in a gaming system, the controller comprising a generator for generating a random trigger value at predetermined times, 35 a receiver for receiving count data, one game console, being data representing at least one parameter of the game console, a calculating means for calculating a total value

representing the total count data received by the receiver, a comparator for comparing the total value with the trigger value and a processor for outputting a prize signal to the one game console if the total value has a predetermined relationship with the trigger value.

5 Preferably the trigger value generator is adapted to select a value of a random variable, calculate an offset value and add this to the random variable to produce the trigger value.

10 Preferably the trigger value is determined independent of turnover of the gaming system.

Preferably the random variable has a minimum value of 1.

15 Preferably a master controller incorporates a plurality of the controllers.

According to another aspect of the present invention there is provided a gaming system comprising at least one game console, a trigger value generator for generating a trigger value, a prize triggering means, and 20 a controller which is adapted to periodically receive count data from one game console, being data representing at least one parameter of each game console, store count data for each game console in a different memory location, calculate a total value representing the total count data 25 received by the receiver for each game console and compare the total value for each game console with the trigger value and operate the prize triggering means to transmit a prize instruction signal to the gaming console which has a total value having a predetermined relationship with the 30 trigger value.

Preferably the trigger value generator comprises a plurality of trigger values each associated with a respective one of the game consoles.

35 It is preferred that the gaming system includes one or more means for implementing one or more of the methods previously outlined.

A preferred embodiment of the present invention

will now be described by way of example only with reference to the accompanying drawings in which:

5 Figure 1 shows a schematic representation of a gaming system according to a preferred embodiment of the present invention;

Figure 2 shows the gaming system according to a second embodiment of the present invention; and

10 Figure 3 shows a flow chart for the gaming system in accordance with the preferred embodiment of the present invention.

15 Figure 1 shows a gaming system 10 having three EGMs 11, 12, 13 which are linked to a gaming system controller 14. This gaming system controller 14 consists of a site controller device 15, a jackpot trigger device 16 and a jackpot prize calculator 17.

An overhead display 18 is also provided above each of the EGMs 11, 12, 13.

20 In operation the site controller 15 receives meter information from each of the EGMs over a communications network such as that utilising fibre optics, ethernet or RS485. In this embodiment the meter information includes a meter representing the cumulative turnover of the gaming machine since it was commissioned.

25 The site controller monitors and stores the latest value of the EGM meters and in particular the turnover meter.

The site controller sends the latest turnover meter value for each EGM to the jackpot trigger device 16.

30 An accumulator located in the jackpot trigger device stores a turnover meter value for each EGM.

35 Each time any one of the meter values is incremented total meter values are stored for each EGM, being a meter value to date. Thus the jackpot trigger device records the total turnover value for each machine at any instant.

The jackpot trigger device also stores a jackpot trigger value which it calculates.

A comparator in the jackpot trigger device compares the current total meter value for each EGM with the trigger value and if the total has reached or exceeded the trigger value the jackpot trigger device outputs a 5 jackpot win signal to the EGM from which the last incremented count value was received by the site controller and which resulted in the total meter value equalling or exceeding the trigger value.

In one situation the jackpot win would be awarded 10 by the jackpot trigger device when the total meter value was equal to the trigger value. However, in some circumstances the total meter value would have to exceed the trigger value in order for the jackpot trigger device to award a jackpot win.

15 When the jackpot trigger device outputs a jackpot win signal this is transmitted to the winning EGM as well as to the overhead display device 18. This results in an appropriate display on both the winning EGM and the overhead display for the purposes of indicating the 20 jackpot win.

The jackpot trigger value is calculated in a random selection process.

The trigger value for an EGM is calculated by the 25 jackpot trigger device.

The jackpot trigger device receives from the site controller the latest value of the EGMs turnover meter as the turnover offset value. The jackpot trigger device 30 then obtains a random value from an appropriate distribution. Typically a random number generator with a uniform distribution is used and the result is modified by an inverse distribution function to give the desired distribution. While any distribution may be used the geometric distribution has the desirable property that the resulting probability of win per unit of turnover is 35 constant.

According to the preferred embodiment the random number generator follows a geometric distribution model.

Thus if the random generator has a discrete random variable X , to follow a geometric distribution with a probability parameter P between 0 and 1, the trials must meet the following requirements:

- 5 a. The total number of trials is potentially infinite;
- b. There are just two outcomes of each trial success and failure;
- c. The outcomes of all the trials are
- 10 statistically independent; and
- d. All the trials have the same probability of success.

In probability terms each unit of turnover is considered a trial and hence P is set to the desired probability of win per unit of turnover. The result from the random number generator is added to a turnover offset value to give the jackpot trigger value.

As shown in Figure 3 for each EGM in the gaming system, after system start up shown as item 25, for each 20 EGM in step 26, the random value is calculated in step 27 and the trigger value is calculated from the received random value and the current turnover value of the EGM in step 28.

Startup processing is complete when the trigger 25 values have been calculated for all EGMS and processing exits via step 29. Then, when an EGM turnover update message is received from an EGM in step 30 the new value of turnover for the EGM is extracted from the message in step 31.

30 In step 32 this turnover value is compared with the trigger value. If the turnover value is not greater than the trigger value no jackpot signal is issued whereas if the turnover value is greater than or equal to the trigger value the jackpot trigger device issues the win 35 signal to the winning EGM in step 33 and in step 33 calculates a new trigger value based on a new random value and the old trigger value of the EGM in step 34.

Typically the flow chart is implemented using software by the combined site controller jackpot triggering device and jackpot prize calculator. The site controller continually polls each EGM for latest meter data and the jackpot trigger device stores total turnover/meter values for each EGM in the manner previously described.

In the above system separate trigger values are calculated for each EGM so that each EGM is played to 10 reach a target turnover value which is greater than or equal to a different trigger value.

Because the trigger value is randomly selected it is theoretically possible for any person playing one of the EGMs 11, 12, 13 to win a jackpot at any time 15 regardless of the amount of turnover generated by the EGMs. However because knowledge of the trigger value allows prediction of when the next win will occur it is important that this trigger value remains secret.

If there is a security risk and at a particular 20 time some one is able to work out the trigger value one option is to periodically change the trigger value so that the security breach would have to occur consistently to know whether the trigger value had changed.

Whenever the jackpot trigger device awards a 25 jackpot by sending an appropriate signals to the EGMs, the trigger value is reset and the jackpot trigger device and the jackpot prize calculator calculates a new trigger value and sends this to the jackpot trigger device.

In figure 2 a gaming system is shown consisting 30 of separate groups of gaming machines in different locations. Thus one group of gaming machines 20 may be located at one premises and one group of gaming machines may be located at a different premises.

Each group of gaming machines would have a site 35 controller and jackpot trigger device 22, 23 and would be linked through a communication system to a central controller 24 which is able to provide the trigger value.

The same or different trigger values may be sent to each group of EGMS at the different premises.

Suitable encryption/decryption methods can be utilised in order to provide security for the trigger 5 value. In this embodiment each group of gaming machines could have appropriate decryption/encryption capabilities to identify the actual trigger value transmitted from the central controller 24.

Alternatively a central jackpot trigger device 10 may be located at the central control station 24 so that each group of gaming machines may be linked together to allow a larger jackpot prize to be awarded. This set up would have the advantage of increased security as trigger value setting and comparison with total accumulated 15 turnover value would be calculated off site.

In this embodiment the local jackpot trigger device would have the main function of issuing the jackpot signal to the appropriate machine(s). The preferred embodiment has been described for a gaming system 20 incorporating a number of gaming machines. However, the invention is equally applicable to a single gaming machine and how it offers a jackpot prize. Thus Figure 1 would be modified to show a single EGM with the remaining components the same. Therefore the site controller would 25 simply receive metering information regarding the number of times the EGM is played and this would be sent to the jackpot trigger device. When the total accumulated value equalled or exceeded the trigger value, a jackpot would be awarded to the EGM.

Generally a jackpot triggering device will be networked to multiple EGMS. However in the networking example of Figure 2 multiple jackpot triggering devices may be networked to a single jackpot prize calculator 30 device.

The jackpot prize calculator can be omitted if the prize amount is fixed.

For a so-called progressive jackpot, the jackpot

prize calculator device calculates the prize value from a start up amount and a percentage of the amount bet on participating EGMS. If there is only a single jackpot triggering device it may be combined with the jackpot 5 prize calculator device to form a self-contained jackpot controller.

Where the gaming system includes a monitoring device for a site or group of machines, this site controller device and the jackpot trigger device may also 10 advantageously be combined as a single unit. The system may also incorporate the feature of separate in machine displays to provide additional capabilities including a feature game, the outcome of which determines the prize awarded to the winning player.

15 It is preferred that the trigger value for an embodiment incorporating a single EGM is calculated by utilising the jackpot trigger device to use the latest value of the EGMS turnover meter as received from the site controller as the turnover offset value. The jackpot 20 trigger device then obtains a random value from an appropriate distribution. The procedure is then similar to that previously described for multiple EGMS.

It is preferred that the preferred embodiment of the present invention has at least one of the following 25 advantages:

i. The jackpot prize/display may be fixed value.

30 ii. The jackpot does not have to be triggered off the combined count from a number of EGMS. Instead each EGM is able to independently trigger the jackpot win.

iii. The rate or time at which the count is updated need not have any impact on the win statistics and need not be the same for each EGM. This would be of particular advantage when using a jackpot triggering 35 device which communicates with the actual gaming machines over a network.

iv. The statistical properties of the system

can be tailored to meet market regulatory or other requirements. In particular a non-deterministic jackpot offering a constant probability of win per unit bet can be implemented using this apparatus.

5 v. Other novel win distributions can be generated using the same system. The system would allow the conditions under which the starting point of the distribution (i.e. the offset or base value to which the random value is added) to be recalculated and a new random
10 value selected to be chosen according to the desired behaviour of the individual jackpot as well as allowing the distribution of wins from that point to be chosen. In the embodiment where there is a uniform probability of win per cent bet, the frequency and conditions under which
15 this reselection occurs would make no difference to the behaviour of the jackpot. In other embodiments where the distribution is not uniform, changing from a system where the selection occurs whenever any EGM wins the jackpot to a system where the selection occurs only when the
20 individual EGM wins the jackpot, gives quite different behaviour. With the former embodiment turnover counting can be avoided.

vi. In contrast to other non-deterministic jackpot triggering methods the win decision can be made
25 instantaneously. The win decision does not inherently lag behind turnover as it does in systems using a time window, which must use a very short time window, increasing computation of load, and/or having additional complexity to deal with "deferred" or "pending" wins or otherwise prevent "walk away".
30

vii. Timing precision is not required to obtain correct win probability.

Based on the above it is apparent that changes and modifications may be made to each of the embodiments
35 described. In particular the particular parameters of an EGM or group of EGMs that is recorded/received by the site controller and transferred to the jackpot triggering

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device can be quite varied.

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CLAIMS

1. A method of awarding a prize in a gaming system including at least one game console comprising the steps of providing a random trigger value, periodically receiving count data from one game console, being data representing at least one parameter of the game console, calculating a total value representing the total count data received, comparing the total value with the trigger value, transmitting a prize instruction signal to an output means if the total value has a predetermined relationship with the trigger value, whereby the prize instruction signal results in at least one game console issuing a prize.

2. The method of awarding a prize as claimed in claim 1 wherein the random trigger value is derived from a random variable having a non-uniform distribution.

3. The method as claimed in claim 1 or 2 wherein the prize instruction signal is transmitted independent of count data received during an elapsed period.

4. The method as claimed in any one of the preceding claims wherein the system includes a plurality of game consoles.

5. The method as claimed in claim 4 including an accumulator means for accumulating count data separately for each game console.

6. The method as claimed in claim 5 including a totaliser means for calculating a total value representing the total count data stored in the accumulator for each game console.

7. The method as claimed in claim 6 wherein each total value calculated by the totalizer is compared with the trigger value and a prize instruction signal is transmitted to the output means if any one or more of the total values has a predetermined relationship with a trigger value.

8. The method as claimed in any one of the

preceding claims wherein the predetermined relationship with a trigger value includes any one or more of:

the total value is equal to the trigger value;

the total value is greater than the trigger

5 value;

the total value is a multiple of the trigger value;

the total value is related to the trigger value through a mathematical relationship.

10 9. The method as claimed in any one of the preceding claims wherein the count data is indicative of the amount wagered on one game console.

15 10. The method as claimed in any one of the preceding claims wherein count data is received from the at least one game console each time an amount is wagered on the at least one game console.

11. The method as claimed in claim 10 wherein the total value is recalculated each time count data is received from the at least one game console.

20 12. The method as claimed in any one of the preceding claims wherein the output means is connected to a display means which indicates that a prize has been won by the at least one game console.

25 13. The method as claimed in claim 12 wherein the display means includes a visual display separate from the at least one game console.

14. The method as claimed in any one of the preceding claims when not dependant on claim 2 wherein the random trigger value is derived from a random variable 30 having a non-uniform distribution.

15. The method as claimed in any one of the preceding claims including the step of providing a plurality of random trigger values with each trigger value being associated with a respective gaming console.

35 16. The method as claimed in claim 2 or 14 wherein the non-uniform distribution is a geometric distribution.

17. The method as claimed in claim 3 when appended to claim 2 wherein the random variable is added to a predetermined offset value to produce the random trigger value.

5 18. The method as claimed in claim 17 wherein the offset value is calculated and stored in a memory location prior to addition to the random variable.

10 19. The method as claimed in claim 3 or 18 wherein the random variable has a distribution which is modified by a function to generate a value with a geometric distribution.

20. The method as claimed in claim 19 wherein the function includes an inverse geometric distribution.

15 21. The method as claimed in any one of the preceding claims wherein the value of the prize is determined independently of the count data.

22. The method as claimed in claim 21 wherein the value of the prize is determined independently of turnover occurring within a predetermined period of time.

20 23. The method as claimed in claim 21 wherein the count data is collected synchronously with game play on the or each game console.

25 24. The method as claimed in any one of the preceding claims wherein the comparing step is performed synchronously with playing the gaming console.

25. The method as claimed in any one of claims 1 to 23 wherein the comparing step is performed asynchronously with playing the gaming console.

30 26. The method as claimed in any one of claims 1 to 23 wherein the comparing step is performed synchronously with receiving count data.

27. The method as claimed in any one of claims 1 to 23 wherein the comparing step is performed asynchronously with receiving count data.

35 28. The method as claimed in any one of the preceding claims wherein the count data represents any one of the following:

one game played on one game console, multiple games played on one game console, one event occurring on one game console.

29. The method as claimed in any one of claims 5 1 to 27 wherein the count data includes any one of the following:

a predetermined amount wagered on a gaming console;

10 a predetermined number of indicia arrangements on a gaming console;

a predetermined combination of events on different gaming consoles;

a predetermined turnover of one or more gaming consoles;

15 a predetermined function of turnover.

30. The method as claimed in any one of the preceding claims including the step of providing a new random trigger value at a predetermined time.

31. The method as claimed in claim 30 wherein 20 the new random trigger value is provided for one game console after a prize is issued to that game console.

32. The method as claimed in claim 2 or 15 including calculating a random value having one probability distribution and transforming the random value 25 by a predetermined function to generate a random value with a different probability distribution.

33. The method as claimed in claim 32 wherein the random value is generated by a pseudo random number generator.

30 34. The method as claimed in any one of the preceding claims wherein the trigger value is reset more frequently than once per output of the prize instruction signal.

35. The method as claimed in claim 17 wherein the offset value is set to the current total value.

36. The method as claimed in claim 35 wherein the offset value and the random value are selected and a

trigger value reset whenever a prize instruction signal is sent to the game console.

37. The method as claimed in any one of the preceding claims wherein the count data is reset to a 5 predetermined number after a prize instruction signal is output.

38. The method as claimed in claim 37 wherein the random value is recalculated after the prize instruction signal is output whereby the trigger value is 10 greater than or equal to the total value.

39. A controller for use in a gaming system, the controller including a trigger value, a generator for generating a random trigger value at predetermined times, a receiver for receiving count data from one game console, 15 being data representing at least one parameter of the game console, a calculating means for calculating a total value representing the total count data received by the receiver, a comparator for comparing the total value with the trigger value and a processor for outputting a prize 20 signal to the one game console if the total value has a predetermined relationship with the trigger value.

40. The controller as claimed in claim 39 wherein the generator is adapted to select a value of a random variable, calculate an offset value and add this to 25 the random value to produce the random trigger value.

41. The controller as claimed in claim 41 wherein the trigger value is determined independent of turnover of the gaming system.

42. The controller as claimed in claim 41 30 wherein the random value has a minimum value of one.

43. The controller as claimed in any one of claims 40 to 42 wherein the receiver is adapted to receive count data from a plurality of game consoles and store the count data in separate memory locations associated with 35 each game console and the calculating means includes an accumulator for calculating a total value for each game console and the comparator is adapted to compare the total

value for each game console with the trigger value.

44. The controller as claimed in any one of claims 39 to 42 wherein a prize signal is output from the processor to the one game console if the total value is 5 equal to or greater than the trigger value.

45. The controller as claimed in any one of claims 40 to 44 wherein the count data includes any one of the group of:

10 console;

a predetermined number of indicia arrangements on a gaming console;

a predetermined combination of events on different gaming consoles;

15 a predetermined turnover of one or more gaming consoles;

a predetermined function of turnover.

46. The controller as claimed in any one of claims 40 to 45 which is configured to be located remotely 20 from the or each game console.

47. A gaming system comprising at least one game console, a trigger value generator for generating a trigger value, a prize triggering means, and a controller which is adapted to periodically receive count data from 25 one game console, being data representing at least one parameter of each game console, store count data for each game console in a different memory location, calculate a total value representing the total count data received by the receiver for each game console and compare the total 30 value for each game console with the trigger value and operate the prize triggering means to transmit a prize instruction signal to the gaming console which has a total value having a predetermined relationship with the trigger value.

35 48. The gaming system as claimed in claim 47 wherein the trigger value generator comprises a plurality of trigger values each associated with a respective one of

the game consoles.

49. The gaming system as claimed in claim 48 wherein the trigger value is determined independently of count data received over a predetermined period of time.

5 50. The gaming system as claimed in claim 48 or 49 wherein the trigger value is derived from a random variable which is added to an offset value.

10 51. The gaming system as claimed in claim 50 wherein the random value is calculated based on a parameter indicative of the probability of a win.

52. The gaming system as claimed in claim 51 wherein the trigger value is selected independently of an amount wagered on the or each gaming console over an elapsed period.

15 53. The method as claimed in claim 52 wherein the controller is located externally from the at least one game console.

20 54. The gaming system as claimed in claim 53 wherein the trigger value generator generates the random value with one probability distribution and transforms the random value by a predetermined function to generate a random value with a different probability distribution.

25 55. The gaming system as claimed in any one of claims 49 to 54 wherein the prize triggering means includes a prize setting means which is adapted to set the value of the prize awarded to the game console receiving the prize instruction signal based on a fixed value determined before count data is received from the or each game console.

30 56. A computer program which is configured to perform the method as claimed in any one of claims 1 to 38.

35 57. A computer storage medium which is adapted to store the computer program as claimed in claim in claim 56.

58. A method substantially as hereinbefore described with reference to the accompanying drawings.

59. A controller substantially as hereinbefore described with reference to the accompanying drawings.

60. A gaming system substantially as hereinbefore described with reference to the accompanying drawings.

61. A computer program configured to operate a gaming system substantially as hereinbefore described with reference to the accompanying drawings.

Dated this 11th day of April 2003

10 UNITAB LIMITED

By their Patent Attorneys

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FIGURE 1

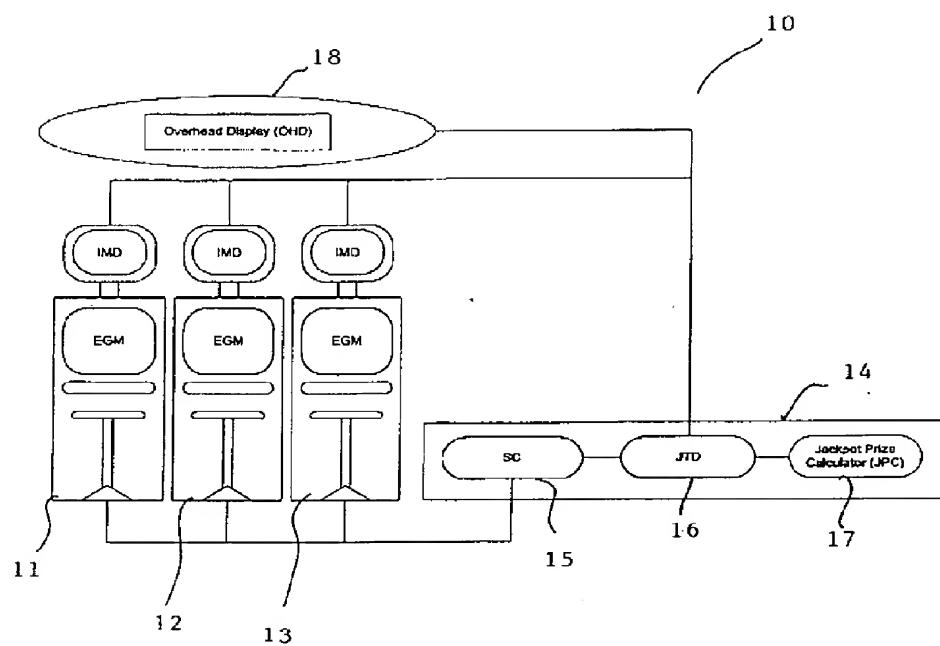


FIGURE 2

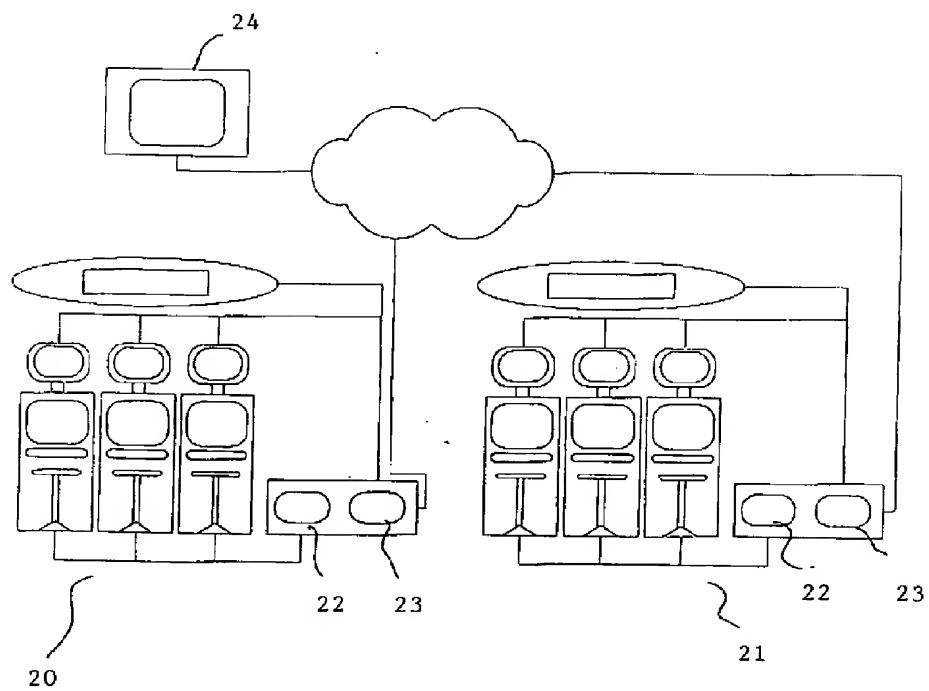


FIGURE 3

